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Amendments to the Specification

[0007] In another embodiment, the method for preparing the supported catalyst system includes combining a dialuminoxane with a support to form a treated catalyst support, combining a halogen substituted aryl borane with the treated catalyst support at conditions sufficient to exchange one or more ligands on the dialuminoxane for one or more ligands on the halogen substituted aryl borane while on the support to form a supported activator represented by the formula:

$$Z\{R'-Al-O-Al-R',\}$$

wherein Z is a polymeric support, R' is independently selected from an alkyl group having 1-20 carbon atoms and an aryl halogen group, and n is 2. The method further includes reacting one or more polymerization catalysts with the supported activator.

[0022] In one aspect, the supported catalyst activator is represented by the formula:

 $Z\{R'-Al-O-Al-R'_n\}$ (I)

wherein: Z is a metal/metalloid oxide or polymeric support; R' is independently selected from an alkyl group having 1-20 carbon atoms and an aryl halogen (ArHal) group; and n is 2. Preferably, the aryl halogen group is a halogenated C₆ or higher carbon number polycyclic aromatic hydrocarbon or aromatic ring assembly in which two or more rings or fused ring systems are joined directly to one another or together. The use of the terms "halogenated" or "halogenation" for the purposes of this application means that at least one third of hydrogen atoms on carbon atoms of the aryl-substituted aromatic ligands are replaced by halogen atoms, and more preferred that the aromatic ligands be perhalogenated. Examples of aryl groups include phenyl, naphthyl,

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anthracenyl, and biphenyl radicals. Exemplary halogens include fluorine, bromine, chlorine and iodine. Fluorine is a more preferred halogen.